CHECKLIST ENVIRONMENTAL ASSESMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Siewing #2 **Operator:** Wesco Operating, Inc.

Location: SE SW Sec. 1, T32N, R32E

County: Phillips MT; Field (or Wildcat): Wildcat

Proposed Project Date: March 1, 2017

I. DESCRIPTION OF ACTION

Wesco Operating, Inc. plans to drill a re-entry of the Siewing #2. It was originally drilled and plugged in 2002. The re-entry will be drilled with 3% potassium chloride water. Surface casing is set at 227'. The TD of this re-entry is 3,200' in the Firemoon Formation.

II. AGENCIES REFERENCED

Montana Bureau of Mines and Geology, GWIC website (Phillips County Wells).

US Fish and Wildlife, Region 6 website ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Phillips County

Montana Natural Heritage Program Website (FWP) Heritage State Rank= S1, S2, S3, T32N R32E

Montana Cadastral Website Surface Ownership and surface use Section 1 T32N R32E

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

1. AIR QUALITY

Long drilling time: No

Unusually deep drilling (high horsepower rig): No

Possible H2S gas production: No H2S anticipated.

In/near Class I air quality area: No Class I air quality area in the area of review

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under

75-2-211. AQB review.

Comments: No special concerns – using small rig to drill a re-entry to 3,200' TD. If there isn't any gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

2. WATER QUALITY

Salt/oil based mud: Yes, 3% KCL.

High water table: No, high water table at this well location.

Surface drainage leads to live water: No, the Milk River is located about 4/5 of a mile to the

south from this location.

Water well contamination: No water wells within a ½ mile radius.

Porous/permeable soils: Slightly, sandy loam.

Class I stream drainage: No.

Groundwater vulnerability area: No.

Mitigation:

Lined reserve pit

X_ Adequate surface casing

__ Berms/dykes, re-routed drainage

X Closed mud system

Off-site disposal of solids/liquids (in approved facility)

Comments: Steel surface casing is cemented to surface to protect ground water. (Rule 36.22.1001).

3. SOILS/VEGETATION/LAND USE

Steam crossings: None anticipated

High erosion potential: No. No cuts or fills anticipated.

Loss of soil productivity: No, location will be restored after drilling if nonproductive. If productive, unused portion of drill site will be reclaimed.

Unusually large wellsite (Describe dimensions): No, existing 200' X 240' location.

Damage to improvements: Slight, surface use is grassland.

Conflict with existing land use/values:

Mitigation

- __ Avoid improvements (topographic tolerance)
- __ Exception location requested
- X Stockpile topsoil
- Stream Crossing Permit (other agency review)
- X Reclaim unused part of wellsite if productive
- Special construction methods to enhance reclamation

Access Road: Access road of 0.6 miles off of Milk River Road.

Drilling fluids/solids: There will be no pit.

4. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Closest residence is 4/5 of a mile to the south. The town of Malta is located about 20 miles to the southwest.

Possibility of H2S: No H2S anticipated.

Size of rig/length of drilling time: Single derrick drilling rig, 5 days drilling time.

Mitigation:

X Proper BOP equipment

__ Topographic sound barriers

__ H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other:

5. WILDLIFE/RECREATION

Sage Grouse: In general habitat. Sage Grouse Program received.

Proximity to sensitive wildlife areas (DFWP identified):

Proximity to recreation sites: Cree Crossing Wildlife Management Area is located about ½ of a mile to the south, the Nelson Reservoir is located 1.7 miles to the south, the Hewitt Lake National Wildlife Refuge is located 1.5 miles to the southwest from location, and the Milk River - Sleeping Buffalo Wildlife Management Area is located about 2 miles to the southeast.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: The species listed as threatened or endangered in Phillips County are the Red Knot, Interior Least Tern, Whooping Crane, Black-footed Ferret, Piping Plover, and Pallid Sturgeon. The Montana Natural Heritage Program (MTNHP) lists sixteen (16)

species of concern: Black-tailed Prairie Dog, Hoary Bat, Little Brown Myotis, Baird's Sparrow, Great Blue Heron, Burrowing Owl, Greater Sage-Grouse, Piping Plover, Caspian Tern, Redheaded Woodpecker, Long-billed Curlew, Common Tern, Northern Redbelly Dace, Iowa Darter, Northern Pearl Dace, and Sauger.

Mitigation: Avoidance (topographic tolerance/exception)
X Other agency review (DFWP, federal agencies, DNRC Trust Lands, MT SGHCP)Screening/fencing of pits, drill site
Other:
Comments: State of Montana leased grazing surface lands. There may be possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. State of Montana "Trust Lands" minerals and surface. Trust Lands will do surface EA.
6. HISTORICAL/CULTURAL/PALEONTOLOGICAL
Proximity to known sites:
Mitigation
avoidance (topographic tolerance, location exception)other agency review (SHPO, DNRC Trust Lands, federal agencies)
Other:
7. SOCIAL/ECONOMIC
Substantial effect on tax base
Create demand for new governmental services
Population increase or relocation
Comments: No concerns.
IV. SUMMARY

No long term impacts expected. Some short term impacts will occur, but can be mitigated. I conclude that the approval of the subject Notice of Intent to Drill (does/<u>does not</u>) constitute a major action of state government significantly affecting the quality of the human environment, and (does/<u>does not</u>) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/ John Gizicki

(title:): Compliance Specialist

Date: 02/14/2017